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# An Economic Appraisal

Harold C. Grinnell

University of New Hampshire
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Station Bulletin 481

AGRICULTURAL EXPERIMENT STATION
UNIVERSITY OF NEW HAMPSHIRE
DURHAM, NEW HAMPSHIRE

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# Foreword

THE Constitution of the State of New Hampshire. Article 83, provides that: "Knowledge and learning, generally diffused through a community, being essential to the preservation of a free government; and spreading the opportunities and advantages of education through the various parts of the country, being highly conducive to promote this end; it shall be the duty of the legislators and magistrates, in all future periods of this government, to cherish the interest of literature and the sciences, and all seminaries and public schools, to encourage private and public institutions, rewards and immunities for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and natural history of the country . . . "

For carrying out the intent of the Constitution, the public laws now provide that each town shall constitute a school district. Except for a few multi-district towns, minor offsets, and the organization of cooperative schools from pre-existing districts, therefore, school districts are coterminous with their respective towns. Each district, however, is a subdivision of the state and functions as a corporate body politic. Through permissive legislation there is a limited local autonomy over the administration of public schools, but under general state supervision.

MARCH 1964

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# Public Education in New Hampshire-- An Economic Appraisal

By HAROLD C. GRINNELL

## The Situation

IN 1961-62 there were 230 school districts maintaining 478 schools as compared with 585 in 1950-51 (Table 1). Most of this decline is the result of a decrease in the number of one-room elementary schools. There were only eight one-room schools offering instruction in as many as six to eight grades in 1961-62, but there were 27 with fewer than six grades, or a total of 35 one-room schools still in operation. Thirteen districts, however, maintain no schools, and send more than 350 pupils to other districts for both elementary and secondary education. In 1961-62 there were 56 senior high schools, a reduction of seven since 1957-58. Junior high schools have been on the increase since 1955-56 when there were only ten — now 17. The combined junior-senior high schools increased from 18 to 22 during the same period.

There appears to be general agreement among professional educators that a secondary school, grades 9-12, should have at least 300 pupils for an effective and efficient comprehensive program. In New Hampshire 31 of the 86 secondary schools had an enrollment in excess of 300 in grades 9-12 (Table 2). These 31, however, accommodated 75 percent of all the pupils above the eighth grade.

New Hampshire is the only state in New England which does not have a broad base tax, and consequently depends on the local property tax for the support of public education to a greater extent than other New England states. The following comparison of the New England states with respect to federal, state and local support in 1960 was taken from the final report of the Interim Commission on Education to the state legislature:

| State | Federal Aid | State Aid | Local Tax |
|---|---|---|---|
| | (Each Source as Percentage of Total) | | |
| | Percent | Percent | Percent |
| Connecticut | 3.1 | 34.6 | 62.3 |
| Rhode Island | 6.5 | 23.2 | 70.3 |
| Massachusetts | 5.3 | 19.9 | 74.8 |
| Maine | 5.9 | 25.8 | 68.3 |
| Vermont | 3.1 | 24.8 | 72.1 |
| New Hampshire | 5.0 | 5.6 | 89.4 |

**Table 1. Distribution of New Hampshire Public Schools by Type of School for Selected Years***

| | *1961–62* | *1957–58* | *1950–51* |
|---|---|---|---|
| One-room one-teacher rural schools, 6-8 grades | 8 | 17 | 67 |
| One-room one-teacher elementary schools, grades 1 to 5 | 27 | 32 | 77 |
| Elementary schools having two or more teachers | 343 | 359 | 346 |
| Approved junior high schools, grades 7-8, or 7-8-9 | 17 | 12 | 12 |
| Senior high schools, grades 9-12 or 10-12 | 56 | 63 | 60 |
| Junior-senior high schools | 22 | 18 | 23 |
| *Total number of schools* | *478* | *501* | *585* |

* Taken from State Department mimeo No. 6383.

In 1961 the Research Division of the National Education Association published a Research Report, 1961-R1, "Rankings of the States, 1961." These rankings are concerned with such matters as composition of the population, personal income, retail sales, public school enrollment and revenues for public education. According to this report New Hampshire ranked second among all the states with respect to percent of revenue for public elementary and secondary schools received from local

**Table 2. Enrollments in Grades 9-12 in New Hampshire Public Schools and Approved Public Academies, September 1961***

| *Range in number of pupils* | *Number of schools* | *Total number of pupils, grades 9–12* |
|---|---|---|
| 50 or less† | 2 | 49 |
| 51 to 100 | 15 | 1,217 |
| 101 to 200 | 31 | 4,554 |
| 201 to 300 | 7 | 1,693 |
| 301 to 500 | 14 | 5,317 |
| More than 500 | 17 | 16,941 |
| *Totals* | *86* | *29,771* |

* Computed from State Department mimeo No. 6375. The total enrollment includes pupils attending grade 9 in junior high schools.
† One school had ten pupils, grades 9 and 10 only, but none the less a high school.

governments, and ranked 49th in percent of revenue from state sources for public schools. In spite of the low state support, New Hampshire ranks 16th in pupil-teacher ratio and 29th in school expenditures per pupil. Since New Hampshire ranks 23rd in per capita personal income, 16th in personal income per child 5 to 17 years of age, and 19th in per capita retail sales, it would not seem that New Hampshire's meager state support for public education is because of incapacity to provide a larger proportion of public school costs.

To partially equalize the local tax burden the legislature, prior to 1962, has provided two major forms of state aid (RSA 198). The first provides for an annual payment " . . . in an amount equal to the remaining costs of the required programs of public elementary and high school education over and above the proceeds of a tax of fourteen dollars per thousand dollars of equalized valuation (hereinafter called the "Local Effort") of each district . . . " Forty percent of the districts qualified for this form of state aid in 1961-62.

The second form of state aid concerns itself with the assistance to local school districts for the payment of debt services created by school construction. The annual grant is equal to 30 percent of the payment of principle or outstanding loans. In the case of a cooperative school district (RSA 195) the annual grant is 40 percent plus five percent for each pre-existing district in excess of two, but not exceeding 55 percent in any case.

In the interest of furthering the principle of providing equality of educational opportunity the state legislature in 1947 passed "An Act to Permit the Establishment of Cooperative School Districts," thereby enabling two or more school districts to establish a cooperative district for elementary and/or secondary education. Except for 1949 the General Court has amended the 1947 act in each subsequent session. In 1951 the act was rewritten, and extensive amendments were made in 1953 and again in 1955. No provision was made in the original act for additional state aid as a special incentive for reorganization. It was not until 1955 when the legislature provided for an annual grant for the partial payment of debt service for school construction as described above.

Acceptance of the cooperative school district act has not been spectacular. Prior to 1961 only six such districts were organized, and these between 1952 and 1957. Fifteen districts were involved in these reorganizations. The number of elementary schools in the six cooperative districts was reduced from 16 to 10, whereas the number of junior and/or senior high schools remained at five. Of the five involving secondary education only two had an enrollment in grades 9-12 in excess of 300 pupils in September, 1961.

## Purpose and Plan of Study

IT is the purpose of this study to make a partial appraisal of selected aspects of public education in New Hampshire in the interest of a system which will provide a more nearly equal educational opportunity for all youth. Economic variables among school districts are examined along the resulting costs per pupil. Some attention is also devoted to an analysis of eight areas which have been considering reorganization into cooperative districts. The Authorized Regional Enrollment Area plan proposed by the Interim Commission on Education is compared with the cooperative district plan with respect to apportionment of costs among the pre-existing districts.

The State Department of Education attempts to keep the public informed on matters pertaining to public education. This is accomplished through the preparation and distribution of mimeographed material of high order. Local committees could profitably supplement their studies with an analysis of the Department's material to determine an appropriate pattern for reorganization. A study of the Department's mimeographed material — supplemented by the census, State Tax Commission reports, and a report of the Planning and Development Commission — forms the nucleus of this study.

The initial plan of study was to establish a procedure for analyzing information necessary for local decision-making with respect to reorganization of school districts. This plan was based on the assumption that school districts had turned down proposals for reorganization because local studies had been inadequate to convince the voters of the benefits to be realized. A conference with the Deputy Commissioner of Education revealed two reasons why districts fail to organize cooperatives: (1) fear of higher costs, and (2) reluctance to give up control of local schools. An investigation of two areas which have attempted to organize a cooperative district over the past 12 or more years supports the Commissioner's appraisal. Reports of local study committees were examined and they appeared to be quite adequate. Some areas employed the services of professional consultants whose carefully prepared comprehensive reports are excellent, but have met with only partial success.

## ECONOMIC VARIATIONS AMONG DISTRICTS

TOWNS vary greatly in many respects, economically, socially and politically, but more specifically in taxable wealth and population. Were it not for these variations all pupils would have equal opportunity and there would be no need for state aid except that which might be initi-

ated because of limited sources of revenue available to local governments, in which case all districts would share alike.

### Total Equalized Valuation

The statutes provide for state aid to school districts based on equalized valuation and average daily membership (ADM) in approved public schools. The equalized valuation is the amount of taxable property computed by the State Tax Commission for each town or school district. It is based on full market value.

Like other economic factors, equalized valuation varies tremendously among school districts. The grouping of school districts according to total equalized valuation tends to separate urban and rural districts. All of the 12 cities included in the tabulations and four other urban centers are concentrated in one group having a valuation of $25 million or more. Moreover, the proportion of districts which qualified for foundation aid declined as total valuation increased. Of the 16 urban districts having a taxable wealth in excess of $25 million only one qualified for any foundation aid.

Towns having an equalized valuation of less than $2 million are quite distinguishable from the towns of higher taxable wealth (Table 3). A large majority of these towns experienced a decline in population from 1950 to 1960. Eleven of the 48 districts with a valuation below $2 million maintain no schools and send both elementary and high school pupils to neighboring districts on a tuition basis. Costs of education per pupil are higher for elementary pupils, and somewhat lower for high school pupils, than for groups of districts with higher valuation.

There is a general tendency for elementary costs per pupil to decline as total taxable valuations increase, indicating relatively poorer efficiency of smaller elementary schools. Such a relationship between taxable wealth and costs per pupil is not so apparent for the high schools. There is evidence here, however, that larger high schools can offer a much more comprehensive program of studies at a cost per pupil quite similar to that of maintaining a more restrictive program in small high schools.

There is no general tendency for school tax rates, percent of tax assessment for schools, property tax per pupil, or valuation per capita to increase or decrease as the total amount of taxable property increases.

### Equalized Valuation Per Capita

The previous discussion was deducted from tabulations for 211 school districts grouped according to *total equalized valuation*. Similar tabulations have been completed for school districts grouped according to *equalized valuation per capita*. By this grouping it was observed that

**Table 3. Comparison of Some Social and Economic Characteristics of New Hampshire Towns (School Districts) Grouped According to Equalized Valuation.***

| *Equalized Valuation in millions of dollars* | *Number of towns* | *Equalized Valuation per town in 000 s* | *Average daily membership in residence* | | *Average costs of education per pupil* | | *Population per town in 1960* | *Percent change in population 1950 to 1960* | *Percent declining in population* |
|---|---|---|---|---|---|---|---|---|---|
| | | | *elem.* | *H.S.* | *elem.* | *H.S.* | | | |
| Less than 1 | 21 | $ 685 | 33.6 | 8.8 | $360.40 | $422.16 | 204 | —4.7% | 57.1% |
| 1 to 2 | 27 | 1495 | 64.9 | 21.6 | 335.95 | 417.68 | 401 | —4.9 | 74.1 |
| 2 to 3 | 30 | 2477 | 92.3 | 28.1 | 302.24 | 436.95 | 564 | 16.1 | 23.3 |
| 3 to 4 | 23 | 3545 | 124.7 | 40.8 | 318.59 | 474.98 | 733 | 3.4 | 52.2 |
| 4 to 5 | 19 | 4436 | 164.5 | 52.2 | 308.41 | 444.42 | 1038 | 9.9 | 26.3 |
| 5 to 7 | 27 | 5917 | 214.7 | 65.6 | 277.77 | 466.06 | 1408 | 13.1 | 22.2 |
| 7 to 10 | 19 | 8528 | 306.6 | 95.4 | 278.93 | 462.44 | 1894 | 12.8 | 31.6 |
| 10 to 15 | 14 | 11439 | 391.8 | 111.4 | 291.31 | 489.12 | 2536 | 19.1 | 7.1 |
| 15 to 25 | 15 | 18672 | 507.0 | 157.2 | 297.70 | 454.17 | 3461 | 22.3 | 6.7 |
| 25 or more | 16 | 79283 | 2107.8 | 704.4 | 283.31 | 436.62 | 19116 | 12.7 | none |

* Exclusive of cooperative districts and multi-district towns.

**Table 4. Some Comparisons of 195 Non-Urban School Districts Grouped According to Equalized Valuation Per Capita.***

| *Equalized Valuation per capita* | *Number of districts* | *Average equalized valuation in 000's* | *ADM per district* | | *Costs per pupil* | | *Population* | |
|---|---|---|---|---|---|---|---|---|
| | | | *Elem.* | *H.S.* | *Elem.* | *H.S.* | *per district 1960* | *percent change 1950-1960* |
| Less than $ 3000 | 34 | $4054 | 220.3 | 67.3 | $264.83 | $393.71 | 1484 | 12.5 |
| $ 3000 to $ 4000 | 48 | 5012 | 227.6 | 67.4 | 273.91 | 452.74 | 1460 | 17.4 |
| $ 4000 to $ 5000 | 40 | 5372 | 198.4 | 60.7 | 299.91 | 430.75 | 1192 | 14.4 |
| $ 5000 to $ 6000 | 21 | 5562 | 164.2 | 53.1 | 307.76 | 473.08 | 1026 | 8.9 |
| $ 6000 to $ 8000 | 21 | 8217 | 180.8 | 57.3 | 323.53 | 482.22 | 1201 | 12.4 |
| $ 8000 to $10000 | 18 | 4164 | 69.7 | 23.2 | 425.78 | 519.32 | 464 | 9.4 |
| $10000 and over | 13 | 7639 | 83.1 | 27.3 | 397.50 | 474.15 | 517 | 5.1 |

* Excludes 16 urban centers having a total taxable wealth in excess of $25 million.

virtually all urban districts appeared within the narrow range of $3,321 and $5,474 valuation per capita. Consequently, the 16 urban districts (those having a total equalized valuation of more than $25 million) were deducted, leaving 195 non-urban districts for inclusion in tabulations.

In general, the number of resident elementary and secondary pupils — and the population — decline as the amount of equalized valuation per capita increases (Table 4). It is also noticeable that costs per pupil tend to be higher among districts having a large amount of equalized valuation per capita. The 31 districts having an equalized valuation per capita of $8,000 or more are very sparsely populated communities. Fourteen of these 31 towns actually declined in population from 1950 to 1960. There are only three high schools maintained among the 31 districts and none of these had a high school ADM of more than 66 pupils in 1960-61. Much of the property in sparsely populated rural communities having a high equalized valuation per capita of $10,000 or more is owned by non-residents.

In 1957 the Planning and Development Commission made a survey of all town properties. The published report provides a classification of taxable properties using *assessed* valuations. The classes and percentage distribution of these properties for the 13 districts having a taxable wealth per capita of $10,000 or more is shown in Table 5 with a comparison for the state as a whole.

For these 13 towns "recreational" and "electric plant" properties together comprise 70.4 percent of the total assessed valuation, whereas, for the state as a whole, only 21.8 percent of the total appear in these two categories. Farms and manufacturing establishments in the 13 dis-

**Table 5. The Distribution of Five Classes of Property for 13 Towns Having an Equalized Valuation Per Capita of $10,000 or More, Compared With State Totals**

| *Classes of Property* | *The 13 Districts* | | *State Totals* | |
|---|---|---|---|---|
| | *Total Valuation* | *Percent of Total* | *Total Valuation* | *Percent of Total* |
| Recreational | $12,405,445 | 37.2 | $ 115,292,848 | 11.0 |
| Farming | 1,329,667 | 4.0 | 55,743,470 | 5.3 |
| Manufacturing* | 658,555 | 2.0 | 135,434,068 | 13.0 |
| Electric Plant | 11,084,187 | 33.2 | 113,295,823 | 10.8 |
| Homes, Businesses, etc. | 7,882,335 | 23.6 | 626,897,800 | 59.9 |
| *Totals* | *$33,360,189* | *100.0* | *$1,046,664,009* | *100.0* |

* This class of property existed in only seven of the 13 towns, and 90 percent of the total is concentrated in one town.

tricts are quite negligible. The recreational category includes seasonal residences, accommodation industries, and business properties which derive their income primarily from recreation, and vacation-travel. This class of property, and that classed as "electric plant," are predominantly owned by non-residents who have no vote on appropriations, but who pay a large proportion of the property tax. This group of 13 relatively wealthy towns are most fortunate in being so located that they have large amounts of recreational and electric plant properties. The average tax rate for these towns was $3.43 per $100 of assessed valuation in 1957. The school tax rate based on equalized valuation was probably less than 90 cents per $100. Obviously, this small group of towns can continue to retain a low property tax rate while giving much more liberal support for town and school purposes than can less fortunate communities. However, none of these 23 districts maintains a high school because of the small number of resident pupils.

The report of the Planning and Development Commission also includes a table enumerating the number and valuation of "Seasonal Residences," which for the 13 towns comprise 58.1 percent of the assessed valuation of all properties classed as "recreational." In two of the 13 towns seasonal residences are negligible, and electric plant or manufactures are much more significant. For the state as a whole, permanent homes, rental housing, and non-recreational commercial businesses comprise a major proportion (59.9 percent) of assessed valuations.

The existence of the above extreme variations in taxable assets among school districts, when education is predominantly financed from a local property tax, is of great significance with respect to the apportionment of costs among pre-existing districts of a cooperative district.

As equalized valuation per capita increases the amount of property tax per pupil also increases, but the average school tax rate declines (Table 6). For 34 districts with an equalized valuation per capita of less than $3,000, the property tax per resident pupil was only $279, but the school tax rate per $1.000 of equalized valuation was $20.67. For 13 districts having an equalized valuation per capita of $10,000 or more the school tax rate was only $8.18, but the property tax per pupil was about double that of the former group, $548. Obviously, these 13 districts, while enjoying a low school tax rate, were able to provide better facilities, pay teachers higher salaries, have fewer pupils per teacher and provide more transportation at public expense.

Material provided by the State Department of Education shows that 95 (or 40.4 percent) of the state's 235 school districts qualified for some "foundation aid" in 1961-62. Of the 195 non-urban districts, all but two of the 34 having a per capita valuation of less than $3,000 qualified for

**Table 6. Comparison of Property Taxes for Schools Among Districts Grouped According to Equalized Valuation Per Capita Exclusive of Major Urban Centers***

| *Equalized Valuation per capita* | *Number of districts* | *Property Taxes* | | |
|---|---|---|---|---|
| | | *Average percent for schools* | *Average school tax rate*** | *Average property tax per pupil* |
| Less than $ 3000 | 34 | 66.25% | $20.67 | $279 |
| $ 3000 to $ 4000 | 48 | 68.22 | 20.54 | 346 |
| $ 4000 to $ 5000 | 40 | 71.02 | 19.29 | 397 |
| $ 5000 to $ 6000 | 21 | 67.99 | 16.61 | 431 |
| $ 6000 to $ 8000 | 21 | 58.38 | 12.84 | 453 |
| $ 8000 to $10000 | 18 | 61.49 | 11.25 | 514 |
| $10000 or more | 13 | 51.78 | 8.18 | 548 |

* Excludes 16 urban centers having a total taxable wealth in excess of $25 million.
** Per $1000 of equalized valuation.

this form of state aid. However, there are 73 of the 195 districts having an equalized valuation per capita of $5,000 or more, and none of these received any foundation aid. A summary of this situation follows:

| Equalized Valuation Per Capita | Number of Towns or Districts | Receiving Foundation Aid |
|---|---|---|
| Less than $3,000 | 34 | 32 (94.1%) |
| $3,000-$4,000 | 48 | 40 (83.3%) |
| $4,000-$5,000 | 40 | 13 (32.5%) |
| $5,000 or more | 73 | none |
| *Total* | *195* | *85 (43.6%)* |

## Costs Per Pupil

"COSTS per pupil" merely expresses a ratio between the number of resident pupils and current expenses exclusive of transportation costs, capital outlay and debt obligations. They vary tremendously among school districts. Whereas some districts maintain no schools and send all pupils elsewhere on a tuition basis, many others continue to provide local education for a small number of pupils. Table 7 gives a comparison of the range, average and median costs per resident pupil in elementary schools by districts grouped according to average-daily-membership (ADM). The group of 44 districts with an ADM between 50 and 100 pupils has an extreme range between the lowest ($212.26) and highest ($683.01) costs per pupil. The ADM for these two districts at each end of the range are 59.7 and 88.0 respectively, and the school tax rates per $1,000 of equalized valuation are $15.35 and $8.44 respectively. Both districts are sparsely populated rural communities and neither maintains

Table 7. Comparisons of Per Pupil Costs of Elementary Education by Districts Grouped According to Average Daily Membership (ADM) in Residence

| *ADM in residence* | *Number of districts* | *ADM per district* | *Costs per ADM* | | |
|---|---|---|---|---|---|
| | | | *Range* | *Average* | *Median* |
| 0 to 50 | 33* | 27.9 | $253.19–$626.35 | $402.78 | $394.21 |
| 50.1 to 100 | 44* | 73.4 | $212.26–$683.01 | $325.67 | $316.36 |
| 100.1 to 150 | 31 | 122.9 | $215.68–$466.53 | $300.01 | $288.14 |
| 150.1 to 200 | 28 | 174.7 | $217.07–$346.82 | $292.44 | $291.36 |
| 200.1 to 250 | 13 | 222.7 | $221.75–$287.74 | $254.06 | $249.49 |
| 250.1 to 300 | 10 | 270.1 | $214.94–$278.40 | $248.49 | $248.06 |
| 300.1 to 400 | 11 | 356.2 | $201.58–$343.19 | $254.56 | $256.31 |
| 400.1 to 500 | 13 | 452.7 | $231.76–$350.48 | $273.00 | $265.20 |
| Over 500 | 23 | 1544.8 | $201.35–$373.38 | $269.12 | $263.82 |

* Ten of the 33 districts and one of the 44 districts maintain no schools.

a high school but sends pupils elsewhere for secondary education at a standard or contract tuition rate. Consequently, there is not much difference in high school costs per pupil. The extreme difference in costs per elementary pupil for these two districts is largely a matter of taxable wealth. The low-cost district has a total equalized valuation of $988.601 and the high-cost district has a total equalized valuation of $11,229,754. This means that the high-cost district can give liberal support to its elementary school with no appreciable effect on the tax rate. Moreover, virtually all of the taxable property in the high-cost district is classed as "electric plant" whereas in the low-cost district two-thirds of the taxable property is in farms and other permanent homes and small businesses, all of which is resident property. In the former case, most of the taxes are paid by non-residents, while the amount of appropriations is determined by resident voters.

The 33 districts with fewer than 50 elementary pupils had an average cost per pupil of $402.78 (Table 7). The average costs per pupil decline with an increase in the number of resident pupils for all groups of districts having fewer than 300 elementary pupils. For districts having more than 300 pupils the average cost per pupil tends to increase slightly.

Table 8 indicates the extremely high costs of maintaining small high schools. Eight districts with fewer than 50 high school pupils in residence had a per-pupil cost of $704.28 compared to $421.21 for 15 districts having more than 300 pupils in residence. Again, the quality of high school education is of utmost importance. The larger high schools are able to offer more comprehensive programs in academic and vocational subjects at lower costs per pupil than could smaller districts which support only very limited programs of study.

**Table 8. Comparison of Per Pupil Costs of High School Education by Districts Grouped According to Average Daily Membership (ADM) in Residence**

| *ADM in residence* | *Number of districts* | *ADM per district* | *Costs per ADM* | | |
|---|---|---|---|---|---|
| | | | *Range* | *Average* | *Median* |
| 0 to 50 | 8 | 37.3 | $397.22–$888.67 | $704.28 | $753.72 |
| 50.1 to 100 | 23 | 72.4 | $389.00–$902.22 | $542.04 | $515.14 |
| 100.1 to 150 | 17 | 127.8 | $362.05–$711.41 | $474.76 | $459.00 |
| 150.1 to 300 | 10 | 220.1 | $297.58–$683.94 | $427.06 | $404.52 |
| Over 300 | 15 | 765.0 | $312.11–$700.67 | $421.21 | $397.07 |

Contrary to the predominant pattern among New Hampshire school districts, there are 10 of the 195 districts in which costs per pupil are actually higher for elementary pupils than for high school pupils. Of these 10 districts none maintains a high school and two maintain no schools at all. Since all high school pupils were sent to neighboring districts at either a contract or standard tuition rate, plus public transportation in most instances, the costs per pupil for secondary education were much below those of districts maintaining a small high school.

Table 9 compares the above 10 districts (Group A), which maintain no high school and have costs per pupil higher for elementary pupils than for high school pupils, with 13 districts (Group B) maintaining a high school for fewer than 60 pupils in residence. The average population of the two groups was 314 and 876 respectively in 1960. The change

**Table 9. Comparison of Two Groups of Rural School Districts:**

**A. 10 districts maintaining no high school, and having per pupil costs for elementary pupils higher than for high school pupils.**

**B. 13 districts maintaining a high school with fewer than 60 pupils in residence.**

| *Items for comparison* | *Group A (10 districts)* | *Group B (13 districts)* |
|---|---|---|
| Population: | | |
| 1960 average | 314 | 876 |
| % change 1950-1960 | —6.0% | 1.2% |
| Average equalized valuation per capita | $9882 | $5501 |
| Average ADM: | | |
| Elementary | 46.6 | 128.3 |
| High School | 18.6 | 43.2 |
| Average costs per pupil: | | |
| Elementary | $ 542 | $ 315 |
| High School | $ 425 | $ 676 |
| Average school property tax per pupil | $ 591 | $ 504 |
| Average school tax rate per $1,000 of equalized valuation | $ 13.70 | $ 19.47 |

in population from 1950 to 1960 indicates relative stability, the A group declining 6.0 percent and the B group increasing 1.2 percent. The average equalized valuation per capita for Group A was 80 percent greater than for Group B, but the average number of resident pupils for the 13 districts was nearly three times as great as for the 10 Group A districts.

Costs per elementary pupil for the A and B groups were $542 and $315, respectively, indicating greater support by the ten districts having a higher taxable wealth per capita, and not maintaining a high school. High school costs per pupil were $425 and $676, respectively, thereby indicating extremely high costs for maintaining small high schools. The average property tax for schools was $591 for the Group A districts and $504 for Group B. Because of the greater taxable wealth per capita, however, the school tax rate was only $13.70 per $1,000 of equalized valuation for small districts not maintaining a high school, compared to $19.47 for the small poorer districts maintaining a high school for fewer than 60 pupils.

## DROPOUTS

IN New Hampshire, all children between six to 16 years of age are required to attend a public school to which they are assigned unless excused because of a physical or mental condition. The statutes further provide that a pupil more than 14 years old who has completed the studies prescribed for elementary schools shall not be required to attend high school if the district in which he resides does not maintain a high school. Although public transportation is required for elementary pupils through the eighth grade, districts are not required to provide transportation to high school except for pupils under the age of 14 in grades above the eighth.

The problem of dropouts is a serious matter, not alone from the point of view of the individual boy or girl, but also in the interest of the national and state economy. In this age of automation the demand for skilled workers exceeds the supply, while the demand for unskilled workers has declined absolutely. Dropouts generally fall in the category of unskilled workers. They are the last to be employed and the first to be discharged. There is every evidence that advanced education pays handsomely over one's productive lifetime, and in a technical society there is urgent need for young men and women to advance their education to the extent of their capabilities.

If all pupils starting in the first grade were to remain and complete secondary education, the number of high school pupils, grades 9-12, would be one-half of elementary pupils, grades 1-8. But actually the number of high school pupils in New Hampshire is approximately one-

third the number of elementary pupils, indicating a significant dropout rate.

There are many reasons why pupils leave school immediately after reaching the compulsory attendance age. Aside from low aptitude, health or emotional condition, and economic conditions at home, many capable pupils possess a poor attitude and lack of interest in academic subjects. They have no incentive. Encouragement from parents is not always forthcoming and, particularly among small high schools, there is a lack of guidance. Also, the small high schools do not ordinarily offer vocational programs for the development of skills. To counteract this situation it might be assumed that the more urban centers, in which the larger high schools are located, offer more opportunities for employment at an earlier age.

It is not possible to measure statistically all the reasons why pupils drop out of school. Information has not been available to study the situation beyond the material obtained from the State Department of Education. Rather extensive tabulations were completed in an effort to determine whether or not maintaining a high school and providing public transportation would have any effect on withdrawals as determined by the number of high school pupils per 100 elementary pupils. Districts are grouped according to total equalized valuation in each case. There is no significant relation between the size of the district as measured by equalized valuation and the number of high school pupils as percent of elementary pupils. Because of many factors not taken into consideration, obviously the results should not be interpreted as all conclusive. A summary of the results of these tabulations follows:

| | No. of Districts | No. of High School Pupils per 100 Elementary |
|---|---|---|
| All Districts | 211 | 32.2 |
| Transportation Provided | 117 | 34.0 |
| Transportation Not Provided | 94 | 29.3 |
| High School Maintained | 73 | 32.6 |
| High School Not Maintained | 138 | 30.3 |
| High School and Transportation Both Provided | 58 | 34.4 |
| Neither High School nor Transportation Provided | 78 | 28.6 |

It appears here that providing public transportation increased the number of high school pupils per 100 elementary pupils by 16 percent, whereas maintaining a high school increases the number by only eight percent. The effect of providing both a high school and public transportation amounts to 20 percent, an appreciable amount.

## RELATION BETWEEN SIZE OF HIGH SCHOOL AND PROGRESS IN COLLEGE

THE registrar at the University of New Hampshire prepared a table to show the progress of college students classified by the size of their high school graduating class. Table 10 summarizes this material. A much smaller proportion of students from small high schools graduate from college with honors than from larger high schools. Also, the proportion of college students who experience academic failure is relatively larger among students from the smaller high schools. Voluntary withdrawals for non-academic reasons are about the same for all groups — about one-third. The difference between small and large high schools are beyond the chance level and cannot be attributed to random factors.

The reasons why college students make poorer progress when coming from a small high school can not be identified here. However, it seems safe to assume that quality of secondary education is an important factor. Small high schools cannot offer as broad a program of studies, and they do not have a teaching staff of sufficient size so that each teacher is a specialist in the subject matter for which he or she is responsible.

## AN ANALYSIS OF SOME AREAS CURRENTLY CONSIDERING REORGANIZATION

EIGHT areas were pointed out by the Deputy Commissioner as having given some evidence of interest in organizing a cooperative school district. Using available material selected figures were tabulated to determine the possible results of such reorganization. Tabulations include population trends, enrollments and average-daily-membership (ADM) in residence, per-pupil costs, valuations and tax rates, transportation costs, and other relevant material. A summary of these extensive tabulations follows, giving special attention to secondary education.

The eight areas involve 52 school districts. Nineteen are currently experiencing a decline in population, but in only two areas as a whole has such a decline occurred. Sixteen of the 52 districts maintain a high school. The distribution of these 16 districts by ADM follows:

| Range in High School Pupils in Residence | Number of Districts |
|---|---|
| 1 to 50 | 1 |
| 51 to 100 | 8 |
| 101 to 200 | 5 |
| 201 to 300 | 1 |
| 301 to 400 | 1 |

Fourteen of the 16 high schools have fewer than 200 pupils in residence — much too small for a comprehensive high school program.

**Table 10. Progress of New Hampshire High School Graduates Grouped According to Size of Graduating Class**

| *Progress at the University of New Hampshire* | *Size of high school graduating class* | | | | |
|---|---|---|---|---|---|
| | *1–24 Graduates* | *25–49 Graduates* | *50–99 Graduates* | *100 or more Graduates* | *All schools* |
| Superior work | 4 ( 3.2%) | 16 ( 10.4%) | 15 ( 7.8%) | 62 ( 14.7%) | 97 ( 10.8%) |
| Grad. in 8 semesters | 41 ( 32.5%) | 52 ( 33.8%) | 72 ( 37.3%) | 146 ( 34.5%) | 311 ( 34.8%) |
| Grad. in more than 8 semesters | 4 ( 3.2%) | 8 ( 5.2%) | 15 ( 7.8%) | 11 ( 2.6%) | 38 ( 4.2%) |
| Still in attendance | 8 ( 6.4%) | 8 ( 5.2%) | 5 ( 2.6%) | 6 ( 1.4%) | 27 ( 3.0%) |
| Academic failure | 27 ( 21.4%) | 16 ( 10.4%) | 31 ( 16.0%) | 62 ( 14.7%) | 136 ( 15.2%) |
| Withdrawals | 42 ( 33.3%) | 54 ( 35.0%) | 55 ( 28.5%) | 136 ( 32.1%) | 287 ( 32.0%) |
| *Totals* | *126 (100 %)* | *154 (100 %)* | *193 (100 %)* | *423 (100 %)* | *896 (100 %)* |

The following table summarizes the distribution of high school pupils by areas, assuming reorganization into cooperative districts materializes:

| | Districts in each area | High schools now maintained | Total high school ADM |
|---|---|---|---|
| No. 1 | 8 | 0 | 254.6 |
| No. 2 | 5 | 2 | 270.4 |
| No. 3 | 5 | 2 | 310.2 |
| No. 4 | 5 | 3 | 382.8 |
| No. 5 | 7 | 3 | 415.9 |
| No. 6 | 5 | 2 | 506.7 |
| No. 7 | 12 | 3 | 512.0 |
| No. 8 | 5 | 1 | 695.3 |
| *Total* | *52* | *16* | *3,347.9* |

If the eight areas were reorganized into cooperative districts, and if all high school pupils attended one central high school in each area, none would have fewer than 250 pupils, and three areas could plan on maintaining a high school in excess of 500 pupils.

Of the 16 districts now maintaining a high school, nine have fewer than 100 resident pupils, ranging from 40.9 to 98.0. The costs per pupil average $600.10 compared to $479.94 for seven high schools having more than 100 pupils, or an average of 198.6 pupils per district.

A brief comparison of the 16 high school districts with the 36 non-high school districts follows:

| | High School Districts | Non-High School Districts |
|---|---|---|
| Number of Districts | 16 | 36 |
| Number of High School Pupils per District | 127.6 | 36.3 |
| Average Costs per High School Pupil | $547.53 | $418.80 |

Costs per resident high school pupil are much higher on the average for those districts which maintain a high school than for those districts which send their pupils elsewhere on a tuition basis.

The school tax rates based on equalized valuation were tabulated and examined. The average rate is $19.67 per $1,000 of property values for the high school districts and $16.67 for districts not maintaining a high school, again indicating higher costs of maintaining small high schools. However, the average tax rate for non-high school districts providing transportation was $16.74 compared with $16.62 for those not providing transportation, a difference of only 12 cents. In other words, the costs of transportation was not an appreciable tax burden compared to those not providing transportation at public expense.

Although conditions vary among the eight areas under consideration. it would appear that there is much to be gained by reorganization into cooperative districts. Aside from quality of education it is more likely that per pupil costs could be reduced by the elimination of many small elementary schools and the small high schools. Among the eight areas there are 14 districts having 100 or fewer resident elementary pupils. and 16 districts with 101 to 200 such pupils (Table 11). Of the former group 12 of the 14 districts had a staff of one teacher. and two districts had two teachers. The costs per pupil were $377.16 and $293.49. respectively. The high school costs per pupil were quite similar for the two groups since, in each case, all high school pupils were sent elsewhere on a tuition basis. For 14 districts maintaining a small high school for fewer than 200 resident pupils. the costs per high school pupil were much higher than for districts not maintaining a high school. There were only three high schools in the eight areas having as many as 200 resident pupils. The average costs per pupil for these three high schools was $434.41 compared to an average of $583.03 for the 14 smaller high schools having fewer than 200 pupils. Here again, the advantage of the comprehensive programs available in the larger high schools has not been taken into consideration. In any event. it appears that a better secondary education could become available to more pupils without increasing costs, assuming a reasonably fair apportionment of the costs among pre-existing districts.

Equalized valuation, as a measure of taxable wealth, increases rapidly from the smaller districts to the larger 14 districts maintaining high

**Table 11. A Comparison of Costs Per Pupil and Other Factors Between Small Non-High School Districts and Small High School Districts**

| *Items* | *Non-High School Districts* | | *High School Districts with fewer than 200 ADM in high school* |
|---|---|---|---|
| | *100 or fewer elem. ADM* | *101 to 200 elem. ADM* | |
| Number of districts | 14 | 16 | 14 |
| Average ADM: | | | |
| Elementary | 52.8 | 145.7 | 287.2 |
| High School | 17.3 | 44.3 | 90.8 |
| Average no. of children ages 6 to 8 (based on 1960 school census) | 81 | 211 | 448 |
| Population increase 1950-1960 | 0.2% | 13.2% | 7.6% |
| Average costs per pupil: | | | |
| Elementary | $377.16 | $293.49 | $254.48 |
| High School | $411.08 | $422.97 | $583.03 |
| Equalized valuation per district | $2,286,786. | $4,300,625. | $7,473,428. |
| Equalized valuation per capita | $6,624 | $4,873 | $3,973 |

schools. On the other hand, valuation per capita declines with nearly equal rapidity, it being much higher among the sparsely populated rural towns. Consequently, high costs per pupil are not necessarily evidenced by a high tax rate in every instance. The school tax rates among the 52 districts in the eight areas varied from $4.31 to $30.41 per $1,000 of equalized valuation, and both of these extremes occur in rural, sparsely populated towns.

## THE PROPOSED A.R.E.A. PLAN

THE 1961 legislature passed a joint resolution providing for the appointment of an interim commission to study the present organization of public schools and the post-secondary facilities in the state, and to submit to the 1963 legislature its findings and recommendations (1961 sessions laws, ch. 291). The commission organized itself into three subcommittees as follows:

A. Public school districts and supervisory unions
B. Higher education
C. Finance

The final report of the commission to the legislature points out the weakness in the provisions of the existing cooperative school law (RSA 195) and suggests alternative procedures. Among the important weaknesses noted is the lack of any provision for a master plan for the state as a whole. It is possible for two or more districts to organize a cooperative without regard for the logical inclusion of other districts in the interest of efficient and effective education. Such planning might create orphan communities and could encourage the continuance of small high schools. In some instances the failure to organize a cooperative district has caused dissension among neighboring districts. In any event, adoption of the "cooperative plan" has been slow and disappointing. Moreover, the cooperative districts in operation before 1961 might appear to offer immediate advantages, but conceivably they might conflict with a more logical grouping of districts in the long run.

The interim commission's subcommittee on school districts and supervisory unions prepared a master plan for the entire state. This plan provides for the organization of all school districts into logical groups of contiguous towns. On the basis of this master plan the subcommittee proposed a reduction in the number of supervisory unions from 48 to 34, and a reduction in the number of high schools and public academies from 86 to 40.

The subcommittee recognized a voluntary cooperation among districts wherein there is an active natural flow of pupils on a tuition basis. For a school accepting tuition pupils the subcommittee proposed the

designation "Authorized Regional Enrollment Area" (A.R.E.A.) school. For some sections of the state it appears that this proposed plan might have a much greater appeal to local districts than the "cooperative" plan.

The cooperative school law provides three formulas for apportionment of school costs among pre-existing districts as follows:

1. All costs apportioned according to total equalized valuation

2. One-half of all costs apportioned on equalized valuation and one-half on average daily membership in residence

3. Some other formula adopted by the district board and approved by the State Department of Education

The application of the above formulas requires some analysis with respect to incentive for organizing cooperative districts versus electing the A.R.E.A. plan. A group of seven towns prepared for an A.R.E.A. school was selected for this purpose (Final report of interim commission on education, chart 6, region 30). Although this is an extreme case, the same analysis can be applied to other areas. Assuming that the seven towns make up a logical combination of school districts for an A.R.E.A. school, is it likely that the same would be favored for a "cooperative district" under formulas 1 or 2 for proportioning costs?

Tables 12A and 12B indicate the extreme variations among the seven towns with respect to selected economic factors. In the first place, this group includes Monroe which is among the highest in taxable wealth per capita in the state, and Benton which is among the lowest in per capita valuation. The town of Haverhill has nearly eight times as many people and nearly six times as many pupils in residence as Monroe, but its equalized valuation is about $2 million less. Monroe has 95.9 percent of its property in the "electric plant" classification.

Haverhill is a multi-district town and maintains two small high schools at relatively high costs per pupil. Orford maintains a still smaller high school at an extremely high cost — $865 per pupil. There are no other high schools in the area. Monroe has extremely high costs per elementary pupil because of its large amount of taxable wealth per pupil and liberal appropriations in support of its school, while at the same time it has a tax rate much below any other town in the area.

This area of seven towns is one of declining population. 8.0 percent from 1950 to 1960. Monroe had an increase of 2.7 percent while all the other towns lost population.

Monroe has 39.0 percent of the total taxable wealth of the area, but only 8.8 percent of the total number of resident pupils, while Haverhill has more than half of all the pupils, but only 32.0 percent of the equalized valuation.

**Table 12A. A Comparison of Selected Factors for Seven Towns in Proposed A.R.E.A. School Number 30 (chart 6 of interim report).**

| *Towns* | *Equalized valuation* | | *School tax rate per $1000* | *Total ADM* | *Costs per pupil* | | *1960 population* |
|---|---|---|---|---|---|---|---|
| | *Total in $000's* | *per capita* | | | *elem.* | *H.S.* | |
| Bath | $1,620 | $2,682 | $19.11 | 141.0 | $282 | $417 | 604 |
| Benton | 251 | 1,459 | 14.19 | 27.0 | 253 | 355 | 172 |
| Haverhill | 9,213 | 2,946 | 20.13 | 717.3 | 217 | 525 | 3,127 |
| Monroe | 11,230 | 26,675 | 8.44 | 120.4 | 683 | 501 | 421 |
| Orford | 2,567 | 3,849 | 28.89 | 149.3 | 287 | 865 | 667 |
| Piermont | 2,224 | 4,662 | 18.91 | 106.0 | 345 | 352 | 477 |
| Warren | 1,688 | 3,080 | 17.20 | 111.4 | 285 | 358 | 548 |
| *Totals* | *$28,793* | | | *1,372.4* | | | *6,016* |

**Table 12B. Percentage Distribution of Selected Factors for Seven Towns in Proposed A.R.E.A. School Number 30**

| *Towns* | *Equalized valuation* | *Total ADM* | *Population* | *Property tax for schools* |
|---|---|---|---|---|
| | *percent of total* | | | |
| Bath | 5.6% | 10.3% | 10.0% | 6.7% |
| Benton | .9 | 1.9 | 2.9 | .8 |
| Haverhill | 32.0 | 52.3 | 52.0 | 40.3 |
| Monroe | 39.0 | 8.8 | 7.0 | 20.6 |
| Orford | 9.0 | 10.9 | 11.1 | 16.1 |
| Piermont | 7.7 | 7.7 | 7.9 | 9.1 |
| Warren | 5.8 | 8.1 | 9.1 | 6.4 |
| *Totals* | *100.0* | *100.0* | *100.0* | *100.0* |

Now assume that this group of seven districts is to consider the organization of a cooperative school district for secondary education with one high school located at Haverhill. Surely each district would give thought to the costs as computed under the first two formulas. RSA195:7. Assume an arbitrary estimate of $180,000 as the total cost of operating such a high school, what would be the apportionment of total costs among the seven districts? Tables 13A and 13B show the results of computations according to the first two formulas.

Obviously, the town of Monroe with its high proportion of the taxable property and small number of pupils would be affected adversely in terms of cost by participating in a cooperative district. The cost per pupil would increase by more than four times its present level. Under

Table 13. Estimated Costs per Pupil for Proposed A.R.E.A. School Number 30, chart 6 of the Interim Commission Report

A. Assume Costs for a Single High School are to be Distributed in Accordance with Formula I, RSA, ch. 195:7

| | *Equalized evaluation as percent of total* | *Amount of tax levy by Formula 1* | *Number of high school ADM* | *Costs per high school by Formula 1* | *Present costs per pupil 1959–60* |
|---|---|---|---|---|---|
| Bath | 5.6 | $ 10,080 | 45.1 | $ 223.50 | $416.83 |
| Benton | 0.9 | 1,620 | 5.0 | 324.00 | 354.80 |
| Haverhill | 32.0 | 57,600 | 182.1 | 316.31 | 524.62 |
| Monroe | 39.0 | 70,200 | 32.4 | 2,166.67 | 500.89 |
| Orford | 9.0 | 16,200 | 44.7 | 362.42 | 864.73 |
| Piermont | 7.7 | 13,860 | 21.1 | 656.87 | 352.00 |
| Warren | 5.8 | 10,440 | 28.5 | 366.32 | 358.46 |
| *Totals* | *100.0* | *$180,000* | *358.9* | | |

B. Assume Costs for a Single High School are to be Distributed in Accordance with Formula II, RSA, ch. 195:7

| *Towns* | *One half of tax levy based on valuation* | *One half of tax levy based on ADM* | *Amount of tax levy by Formula II* | *Costs per high school pupil by Formula II* |
|---|---|---|---|---|
| Bath | $ 5,040 | $11,340 | $ 16,380 | $ 363.19 |
| Benton | 810 | 1,260 | 2,070 | 414.00 |
| Haverhill | 28,800 | 45,630 | 74,430 | 408.73 |
| Monroe | 35,100 | 8,100 | 43,200 | 1,333.33 |
| Orford | 8,100 | 11,250 | 19,350 | 432.89 |
| Piermont | 6,930 | 5,310 | 12,240 | 580.09 |
| Warren | 5,220 | 7,110 | 12,330 | 432.63 |
| *Totals* | *$90.0000* | *$90.000* | *$180,000* | |

such an apportionment surely there would be no financial incentive for Monroe to vote in favor of a cooperative district, but would prefer to provide secondary education on a tuition basis. The town of Piermont would also lose in a cooperative. Because of small high schools in Haverhill and Orford and the resulting high costs per pupil, on the other hand, these districts would have much to gain by organizing a cooperative under formula 1, while Monroe paid the bill.

If the costs of maintaining a single high school were apportioned according to formula 2, one-half on the basis of equalized valuation and one-half on the basis of number of resident pupils, the situation changes.

but only to a degree. Monroe would increase its costs per pupil two and one-half times present costs (Table 13B). The inequalities still exist. Both Haverhill and Orford would reduce costs per pupil while Benton, Piermont and Warren would increase costs, but to a much lesser degree than Monroe.

The A.R.E.A. school, as proposed by the interim commission, appears to offer advantage over the "cooperative district," unless an acceptable formula (permitted by formula 3) could be devised to fit the situation. In the A.R.E.A. organization each district would send its pupils to the district maintaining the high school paying tuition at the average state rate or on a contract basis. In the event that the per pupil costs were greater than the standard tuition rate, then here is an opportunity for state aid to make up the difference. Under the A.R.E.A. plan of organization each district would maintain its own school board and would not be represented on the board of the district maintaining the facilities. This may or may not be an advantage. Surely, as far as quality of education is concerned, one high school with an enrollment of some 360 pupils could offer a better program of academic and vocational subjects than could possibly be offered by the three present high schools.

Apparently it is not enough to conclude that costs per pupil decline with larger enrollments. For some communities, now members of a cooperative, the per pupil costs could be affected adversely, depending on how costs are apportioned. A study of cooperative districts a few years hence should reveal interesting information.

## SUMMARY

THE current interest in public education in New Hampshire centers around an effort toward equal educational opportunity for all youth. In view of the large number of secondary and elementary schools, many of which are too small to provide an adequate staff for effective and efficient education, some reorganization of school districts is mandatory. Many rural districts do not have an enrollment of elementary pupils large enough to employ one teacher per grade. Of the 86 high schools only 31 have more than 300 pupils, a minimum for offering a comprehensive program of academic and vocational subjects to prepare pupils for furthering their education or for skilled employment.

In the interest of encouraging the organization of larger schools the 1947 legislature passed a cooperative school district statute making it possible for school districts to combine voluntarily into larger units. Acceptance of this plan has been disappointing — only six cooperative districts were organized prior to 1961, and some of these are not of great significance.

In some instances school districts have failed to adopt the cooperative plan because the voters believe that such reorganization would result in higher costs. An examination of material provided by the State Department does not support this apprehension. For elementary education the costs per pupil decline with an increase in average daily membership in residence up to about 300 pupils. Moreover, larger high schools of 300 or more pupils are offering comprehensive programs at lower costs per pupil than small high schools offering very meager programs with a limited faculty.

There are extreme variations among school districts, more particularly with respect to such economic factors as total equalized valuation, equalized valuation per capita, trends in population, and the distribution of taxable property as classified by the Planning and Development Commission in 1957. It is because of these variations that some districts are more able than others to provide better facilities, pay higher salaries, and have fewer pupils per teacher, and without an appreciable increase in the tax rate.

Local committees could well supplement their studies by giving thought to these variables, and to population and school census trends when attempting to determine the most feasible plans for local schools, whether it is a matter of abandoning antiquated facilities versus replacing them, or adding more space, or whether it is a matter of joining a cooperative district or an A.R.E.A. school as proposed by the Interim Commission. Sparsely populated rural districts, in many instances, can ill afford to maintain any schools and should join the ranks of the 13 districts which send all of their pupils to neighboring districts on a tuition basis. Cost per pupil is not necessarily the final determinant, which is rather one of equal educational opportunity for all youth. Surely such an opportunity will not be attained by the retention of small high schools. Larger, more comprehensive high schools are maintained at much lower cost per pupil than small high schools. Furthermore, graduates of small high schools do not make progress in college comparable to those who graduate from large high schools.

An equitable apportionment of the costs of maintaining a cooperative district among the pre-existing districts is a serious problem. In view of the extreme variations in the economy among school districts it is not likely that any formula for apportioning costs of a cooperative district could possibly fit all cases, if any. In this respect the A.R.E.A. (Authorized Regional Enrollment Area) school as proposed by the Interim Commission offers a distinct advantage in many cases. Each district would maintain its identity under its own school board, and send its pupils to the A.R.E.A. school on a tuition basis, thereby eliminating the need for

apportioning costs. The organization of such schools would be in accordance with a master plan for the entire state, thus avoiding the creation of "orphan" districts.

The extremely heavy dependence on the local property tax for the support of public education is a serious matter. At this writing the legislature is giving serious consideration to the recommendations of the Interim Commission on Education in this respect.

Grinnell, Harold C., 1964

Public Education in New Hampshire — An Economic Appraisal

Small high schools cannot provide adequate educational opportunities for New Hampshire youth. Recent legislation to encourage cooperative school districts has not met with wide acceptance, apparently because voters erroneously believe that reorganization results in higher costs.

Some attention might be given to alternate plans such as the "A.R.E.A." plan in which districts maintain individual school boards and send students to a central school on a tuition basis.

The local property tax bears an extremely high proportion of the costs of public education in New Hampshire.